

The newsletter for Yamhill County Master Gardeners



THURSDAY 10-02: McMinnville Farmers Market TUESDAY 10-07 10:00 Grand Ronde Nursery

> "Growi na and Belongina" class— Harvesting indi genous foods.

THURSDAY 10-09: McMinnville Farmers Market

THURSDAY 10-16: McMinnville Farmers Market

SATURDAY 10-08: YCMGA Board meeting, 10:00 am in extension Auditorium

All Master Gardeners & Students are invited

THURSDAY 10-23: 10:00 am "Pollinators" presentation, Extension Auditorium

TUESDAY, 10-21: 1:00 pm

Plant Sale KICK-OFF Extension auditorium

Regular I y-sche duled

Library Committee

FIRST Monday OF THE MONTH 1:00 PM

Community Garden

FIRST FRIDAY OF THE MONTH MEET AT 10:00 A.M.

Perennial Propagation

EVERY TUESDAY, 9:00 AM

Education Garden

MAINTENANCE EVERY WEDNESDAY 9:30 AM AT FAIRGROUNDS

insect Committee HAS LAST MEETING FOR 2025. POT LUCK ON THURSDAY, 10-02



Awards/Memorials Nancy Woodworth

Community Garden Alex Préntice

**Demonstration Gardens** Donn Callaham Rita Canales

**Education Outreach** Carolyn Nyquist

> Newsletter Donn Callaham

Farmers' Mkt. Mac. Tom Canales

Farmers' Market Newberg Lydia Cook

Garden-to-Table Beth LaForce Jennifer Scott

> Greenhouse Linda Coakley

Hospitality Gail Stoltz

**Insect Committee** Terry Hart Joan McKibben-Williams

**Photography** Mary Lou Polvi

Plant Sale

Gail Stolz

Dennis Queenville Propagation

Mary Ann Nolan Linda Sellheim

Scholarships Susan Nesbitt

Social Media/Website Lael Whitaker Dave Gilbey

Spring into Gardening

Sue Nesbitt Libby Kupp

**Sunshine Committee** 

Susan Alin Sandy Beaver Judi Beck Polly Blum



#### **Nominations Needed**

We need your help selecting master gardeners for the following awards! **Golden Trowel Award:** 

This award is for someone that has successfully created and advanced meaningful and impactful project.

#### **Above and Beyond Awards:**

A person or persons whose contributions have greatly influenced a project's success.

**Appreciation Awards:** There are 20-25 awards in this category, so multiple nominations are encouraged.

A contribution of time, talent, and/or expertise that deserves extra recognition. Growing and Belonging County Award: This award honors individuals or teams who foster personal growth, strengthen connections, and create inclusive spaces where people feel valued and supported.

Please send me the names and a brief statement of why you feel they should get an award. All nominations are due by Monday, October 6th.

Thanks for your help! Carla

#### This is Bill.

Bill enters his hours after every event. Bill knows that ALL of his MG Hours are due October 31st!

When Bill gets reminder emails from Carla...

Bill just laughs and deletes the mail.

because his hours are entered

Bill is smart.

Be like Bill.



If you have any questions or need any help inputting or getting scheduled for your hours please let Carla know.



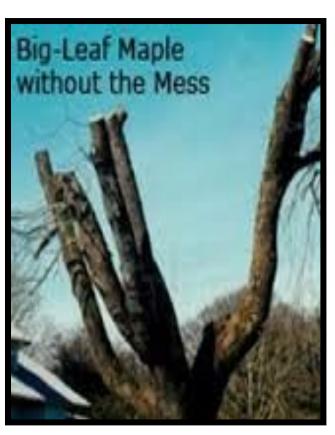


New signage at office garden, listing requirements for all the plants in this garden.





Seeming to sprout from the depths of Lake Wanaka in New Zealand is this lone willow tree.









#### Glamorous native slug photographed by Joan Lusk.

## CHANTARELLE MUSHROOMS

Picked locally by Lane Roemmick, outstanding in their size and prime condition due to the dry weather. No, we are **not** talking mushrooms as a food source, but rather only as a handsome fungus to be admired.













New Signage in Office Garden, entrance to auditorium

## Power Bars for Bees

cientists have now introduced a remarkable food source that can sustain honeybee colonies indefinitely, even without natural pollen.

The research comes from Washington State University (WSU) and APIX Biosciences NV in



Belgium. The trials showed that nutritionally stressed colonies thrived on this specially-designed diet.

The innovation mirrors the artificial diets long used for livestock and pets. It provides honey bees with every essential nutrient, potentially offering a critical strategy against rising colony collapse.

The new food resembles human "power bars." These nutrient-rich bars are placed inside hives, where young bees process and distribute them to larvae and adults.

This directly addresses the growing issue of poor nutrition that has long plagued honey bee survival. Changes in land use, urban expansion, and extreme weather all negatively impact nutrition for honey bees and other pollinators.

Honey bees are generalists and do not get all their nutrition from a single source. They need variety in their diet to survive but find it increasingly difficult to find the continuous supply of pollen they need to sustain the colony.

Until this study, honey bees were the only livestock that could *not* be maintained on a (humanmade) feed. Trials showed that colonies under nutritional stress fared much better on the new diet compared to current feeding practices. A major finding during the research was the discovery of isofucosterol, a nutrient found naturally in pollen. This molecule proved critical for bee <u>survival</u>.

To confirm real-world effectiveness, the WSU team tested the diet with colonies in blueberry and <u>sunflower</u> fields. These environments are known to have poor pollen quality and typically stress colonies. Some beekeepers don't even pollinate blueberries anymore any more because colonies suffer or die and the pollination fees don't cover the losses.

<u>Blueberry</u> pollen isn't very nutritious for honey bees, but if they have this supplemental food source, beekeepers may return to pollinating those fields since they know their bees are more likely to survive.

The study showed that colonies receiving the complete diet maintained higher survival and growth rates while those on commercial substitutes did not. The study demonstrated that colonies given the complete diet remained strong from spring through autumn, even during periods of transport, high-density storage, and natural pollen scarcity.



These larger, healthier colonies are then better prepared for overwintering, a key predictor of survival in temperate climates.

## PESKY PROFILES



By Heather Stoven

## Woodsorrel (Oxalis sp.)

e have had a number of lawn questions recently, especially related to weeds in lawns. Questions about woodsorrel (Oxalis sp., Oxilidaceae) have been particularly common. Woodsorrel looks similar to clover, but they are in different plant families and are not closely related.

Depending on the species, woodsorrel can be green or bronze-colored with trifoliate heart-shaped leaflets. This perennial weed is common in lawns and landscapes, and spreads both via creeping rhizomes and seeds. The seeds are expelled forcefully up to 16' via seed capsules which are shaped somewhat like okra.

The creeping woodsorrel (*Oxalis corniculata*) tends to be more prostrate in form and can be common on the soil surface of containerized

plants. The rhizomes that run along the surface of the soil make it hard to pull while getting all the roots (from personal experience!). Adding mulch to landscape areas or containers can help reduce new plants since the seeds require light

for germination. In addition, herbicides can be used preventatively or after emergence to help manage this common weed.



## Heather's Highlights

## Hello everyone!

hope you are enjoying the change of seasons.
Our growing season is wrapping up as are our farmers' markets and events. We are

organizing a Growing and Belonging credit event on October 7<sup>th</sup> at the Confederated

Tribes of Grand Ronde Nursery – learn how to harvest indigenous foods! Please let Carla or me know if you would like to sign up for this event. Click box to sign up: Grand Ronde Nursery

Also, a reminder -the deadline for completing your hours for graduation and recertification is October 31<sup>st</sup>, please reach out if you have questions about how to complete or enter your hours.

#### ! Do not leave this until the last minute !

Carla spends considerable time compiling everything in VRS and she has a short turn-around to get everything ready for the graduation and awards ceremony. The event will be held at the Yamhill Valley Heritage Center on Sunday, November 16<sup>th</sup>. Planning is underway and we are looking forward to celebrating our 2025 year!

We are looking for awards nominations, so please send Carla a note about a deserving fellow Master Gardener. You all dedicate so much to the program, so we look forward to the opportunity to recognize your hard work.

## Plastic from Plants?

Bioplastics: it sounds like the answer to most of the problems created by plastic. Instead of using petroleum to make plastics, use renewable plants! Remove the need for fossil fuels (of which eight percent are used for plastic), make the plastic biodegradable, and use carbon stored in the plants, rather than carbon that has been stored underground for millions of years. To be considered biodegradable, Decomposition of the plastic must occur at a rate similar to the other elements of the material being composted (within 6 months) and leave no toxic residue that would adversely impact the ability of the finished compost to support plant growth.

Can Claims for bioplastics be considered Greenwashing?"

But there is more to consider...

One of the claims of bioplastics (plastics made from plants) is that it is bio-

degradable. That sounds great, but read the fine print on your food packaging. Much plastic will compost only with "industrial composting." Industrial composting is necessary to heat the bioplastic to a high enough temperature that allows microbes to break it down. Without the specific conditions in a commercial composting facility, discarded bioplastic won't degrade on its own in the expected time frame of one year, either in landfills or even your home compost heap.

This means that unless this plastic is sorted from all other plastics and processed by a specialized facility, when discarded it will really be no different from petroleum-based plastics. Unfortunately, there are still very few industrial composting facilities, and fewer still programs to collect and ship

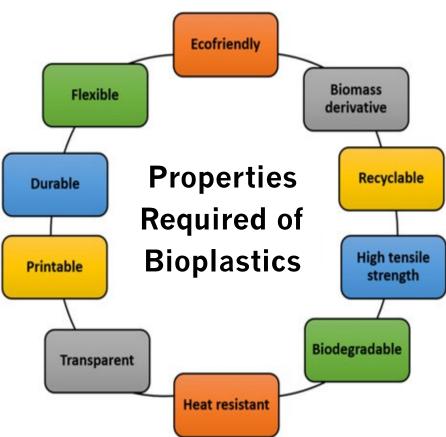
certain plastics to the facilities.

Without adequate composting infrastructure and consumer know-how, bioplastic products can end up an example of "greenwashing," a phrase coined by environmentalists to indicate when consumers are misled about how sustainable a product truly is.

When bioplastics end up in any environments (marine or terrestrial) they'll function similarly to petroleum-based plastic, breaking down into micro-sized pieces, lasting for decades or longer, and presenting a danger to many forms of life. The chemical PLA in the plastic will leach out into any organism consuming pieces of it, causing the same physiological changes that petroleum plastics cause.

There are other considerations with the production of plastic from plant sources:

 Where is it grown? Is valuable habitat being consumed by the crop?



- How much land does it take up?
- Does it require large quantities of water (another diminishing resource in agricultural regions)?
- Does it require fertilization? If so, then the effects of manufacturing fertilizer and the pollution that causes must be considered.
- Is land being diverted from food production (even though more land is needed to produce food) to produce plastic?
- Will the plastic have all the necessary qualities required of the packaging? An example of this is when Frito-Lay withdrew a high-profile example of plant-based plastic for the majority of its SunChips bags. Why? Not because it was unsafe or failed to compost as advertised but because the sound of the crinkling plastic was louder than customers liked.

One of the most common plants for use in plastics is corn. Raw <u>corn-based PLA</u> (the chemical in the plastic) is made by converting sugars from sugarcane farmed in Brazil into the polyethylene terephthalate (PET) plastic commonly used in the ubiquitous clear bottles for beverages. Corn, though, relies on heavy fertilization and vast amounts of water, making corn highly energy-intensive.

The other predominant crop is sugarcane farmed in Brazil: this is already being used in PET plastic bottles. Through fermentation <u>ethanol is produced</u> from that sugarcane, which is then exported to India where it is processed as monoethylene glycol, or MEG—which comprises roughly 30 percent of a typical PET bottle. (The rest of the PET plastic is made from petroleum).

For now this is the most sustainable raw material for plastic. Longer term, the goal is to make plastic from plant *waste* such as the lignin or cellulose in the sugarcane's leaves and stems.



The possibility of using lignin, a material found in all plant cell walls, and carbon dioxide to create a new kind of polyurethane is being investigated but is not yet functional.

There may be a <u>breakthrough</u> from a team of researchers in China. The process they are perfecting creates the same high-performance materials in traditional polyurethanes but uses abundant waste from paper mills and captured carbon dioxide. The resulting material is as strong and heat-resistant as conventional versions but dissolves easily in solvents for manufacturing.

So, to answer the original question: plastic from plants is not yet viable, but the possibility may well be in our near future.

Donn Callaham



# Propagation

### Back-to-School Season Finds Propagation Practicing Division

ummer's end felt like the holidays in perennial propagation. Plant gifts arrived at Wiser nearly every week. The team divided hostas from Ruth Estrada, and then potted native plants from Dennis Quenneville. Next, the group clipped lavender cuttings from Star Tomson's fragrant collection.

The last gift of summer came from Farmington Gardens. Carloads of carefully selected perennials arrived at Wiser. It feels like back-to-school

Star in and with her lavender.

season indeed with the amount of division happening each week. Seeing the plants multiply in "grow alley" gets an A+.

If you have a free Tuesday this fall, propagation is sure to be needing volunteers. Bring your hori hori knife as

plant mathematics takes sharp effort. Extra



hands are also needed to remove moss and weeds, as well as to move tender perennials into the greenhouse in October.

While there is lots to do in the short term, perennial propagation still has seeds in its sights for winter.

We will continue to share educational videos featuring seed collecting and seed starting. If you have expertise or seeds you think would work for the plant sale, please reach out.

Propagation meets on Tuesdays at 10 am. Contact Carla (<u>carla.stables@oregonstate.edu</u>) to begin receiving weekly updates from the group via Linda Sellheim.

lindasellheim@gmail.com.



Angie Windheim

anana plants are large herbs, distantly related to ginger. They are considered an herb because they never form woody stems the way trees do. The <u>pseudostem</u> begins as a small shoot from an underground rhizome called a corm. It grows upward as a single stalk with a tight spiral of leaf sheaths wrapped around it. Banana leaves are simply extensions of the sheaths.



## Leaf Me Be



s autumn arrives, do you find yourself heading to bed a bit earlier, sniffing the scent of phantom soup in the air, or craving reciprocal adoration from the sweaters stacked on your shelves? These are gentle reminders that the season of senescence is here - for all of us.

Senescence is a magical process. Carbohydrates travel from the leaves and settle into the roots, storing energy for a vibrant spring revival. The leaves, having completed the green/juvenile part of their mission, drift to the ground, like a feather in a movie's opening credits, blanketing the soil. In this way, the garden works as a harmonious team, each part contributing to the cycle of renewal.

You may notice your daily garden routine shifting, yet your love to be a part of your garden still pulls at you. Can I continue to feel a useful part of my garden as the new green tissue production stops?

#### Absolutely! Here are some helpful tasks:

- Winterize emitters, hoses and sprayers.
- Clean and store garden tools.
- Organize seeds and pots.
- Broadcast cover crops to reduce erosion and

enrich the soil.

- Scatter seed heads where you hope new growth will emerge next year.
- Reflect on your gardening achievements and dream of the coming season.

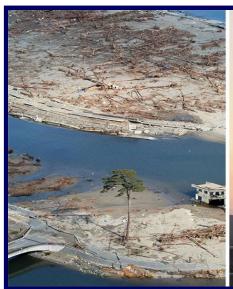
LEAVE THE LEAVES!

- Let Fallen Leaves Work Their Magic!
- Yes—leave the fallen leaves where they are. In addition to holding off on pruning, disturbing or tilling the soil, removing annual plants-leave the leaves. These leaves form nature's blanket, tucking the soil in for its restorative winter nap as well as generating carbon. This carbon enriches the soil as organic matter, improving structure, water retention, and microbial life. Though undesired pathogens can overwinter in dead tissue, spring will be here soon enough to mitigate!
- As the garden settles into its winter rest, let the natural magic unfold and prepare for renewal with the arrival of spring. Honor what your elders have laid for you to grow from.

## Happy Senescence season!



L. Eisold





ut of 70,000 trees, this 250year-old Miracle pine tree was
the only survivor of the 2011 Japan
tsunami. Although the tree survived
initially, high salinity slowly killed its
roots until the tree was dead 18
months later. After that, the 27-meter
-tall tree was removed and a metal
skeleton was inserted into its trunk to
preserve its shape. Additionally,
replica branches and leaves made
from a synthetic resin were added and
the "tree" was returned to its
original location.

## Sterilizing Pruning Tools

#### NEVER USE BLEACH TO CLEAN TOOLS! IT IS:

- Corrosive, and will pit and discolor blades.
- Hazardous to health, aggravating lung problems (such as asthma) if inhaled.
- *Phytotoxic* to living tissue: any bleach left on a blade will damage the plant tissue it touches.
- Destructive of clothing, and your skin.
- Awkward to use, requiring rubber gloves and safety glasses, and being very difficult to carry with you without spillage.

#### HERE ARE SOME TIPS FOR STERILIZING PRUNERS

- **Isopropyl alcohol** is one of the best disinfectants: use alcohol dips or a bottle and towel.
- Household cleaners (Listerine, Lysol, Pine-Sol) are safe and very effective. Lysol is the best.
- Be sure to **clean tools** of dirt, debris, etc. before disinfecting.
- After dipping your pruning tools, be sure to wipe away excess disinfectant to avoid injuring the next plant.
- A longer soaking may be needed for pruning surfaces that are not smooth.
- Never use disinfectants on pruning wounds; disinfectants are phytotoxic and cause harm.

See this website for all the details and research involved:

https://puyallup.wsu.edu/lcs/



American Burying Beetle,
Nicrophorus americanus

photographed by Candace and
identified by Google Lens

Burying beetles are true to their name—they bury the carcasses of small vertebrates such as birds and rodents as a food source for their larvae; this makes them carnivorous. They are unusual among insects in that both the male and female parents take care of their brood.

#### How do you pick the Right Fertilizer?

Ithough plants require about 16 mineral nutrients, most are needed in only tiny amounts. In fact, at the core of plant nutrition – and therefore fertilizers – are just three macronutrients: nitrogen (N), phosphorus (P) and potassium (K), which fuel leaf growth, root development and flower/fruit formation, respectively.

The key difference among fertilizers is the ratio of these three ingredients, which is always labeled on the container after the letters "NPK." If you want a lush lawn, get a feed with higher nitrogen value. For flowering or fruiting plants, you will need more potassium. So how else do fertilizers differ? For fertilizers with identical ratios, the only difference is the picture on the container.

Plants take up whatever they need from the soil in the actual amounts they need. Plants only need fertilizer added if something is lacking in the soil, and too much of any fertilizer component is detrimental. Too much nitrogen leads to prolific soft and pest-prone new

growth and poor-tasting produce. Too much phosphorous will wash into the soil, migrate to waterways, and cause serious environmental damage.

The answer? If plants have unusual needs (such as rhododendrons needing acid soil and more iron and manganese) then a specialized fertilizer may be justified. But for most plants (including houseplants) a single balanced plant feed is fine. No added fertilizer is also fine most of the time, leaving you with more time and money to enjoy your gardening.



## Wooly bear: Master of Survival

nlike mammals, caterpillars can't regulate their body temperatures. Unless they burrow or cocoon, they're subject to the wind and rain. Though the wooly bear is covered in a spiky-looking fuzz, the fuzz does not insulate. (It protects the caterpillar from predators and parasitoids instead).

<u>To live through the cold</u>, wooly bears make antifreeze like glycerol that they put into their cells, and they excrete water from their cells.

Water of course gets bigger when it turns to ice, so if a cell is filled with water, and it freezes, it could burst the cell membrane. So the caterpillar does two things: it gets the

water out of its cells and lowers the temperature at which the liquid freezes.

The water can freeze in extracellular spaces where it cannot damage cells. When the

weather warms the wooly bears reverse this process: they are able to do this multiple times during a winter.





Based on article in Scientific American July 28, 2025



his tale starts in the Chef's Garden but ends in my home kitchen.

I use a fair amount of parsley, thyme, oregano, and basil all year, so I dehydrate the herbs during growing season to last for the coming year.

Last spring after we planted the parsley the Chef's Garden had two orphan plants, (unlabeled), which I took home and planted. I carefully watered and weeded their new home. All was well. The plants grew large enough that I

started harvesting leaves. Each week I harvested leaves from the various herbs and dehydrated them. Gradually I accumulated gallon Ziplock bags full of dried herbs.

Because parsley likes to bolt by midsummer, in June I purchased a 6-pack of parsley from a local nursery. They were duly planted out and watered and weeded like the other parsley.

Two weeks ago on my blitz visit to the garden grabbing herb leaves to dehydrate, I noticed but didn't really think about it: the parsley had a



bulbous root rising from the ground. I also noticed that the leaves were sturdier and darker green then that of the younger parsley. However, I was in a rush to get through the task of prepping for dehydrating, so thought no more about it.

The following week it finally clicked. The "visible root" was larger and definitely not an overambitious parsley root but something else entirely. You have probably guessed the answer. I planted orphan celeriac instead of orphan parsley! Because I was expecting to see parsley, that is what I saw. I didn't question until weeks



had passed. I had 2-gallon Ziplock bags full of dried celeriac leaves—not dried parsley leaves!!!

How could I have been so blind? I'm supposed to be a *Master* Gardener! The moral of the story is: carefully label seedlings and STOP AND THINK when harvesting. Fortunately, celeriac leaves are totally edible, just not quite the flavor of parsley.

I thought this incident too good to keep to myself. The chefs at The Allison were vastly amused at my mis-identification of plants. Now you can be amused as well. If I'm lucky, Heather and Carla won't yank my Master Gardener certification or require that I get a new prescription for glasses!



e've almost finished another season. 1,000 pounds of harvested produce went to YCAP this month, and the Parkview Produce Table was busy on Thursday mornings through 9/11. A huge thanks to everyone who shows up to harvest on Wednesdays, and to the row gardeners who contribute their excess produce.

Marcy organized another great potluck at the garden on 9/20. Several of our outstanding volunteers were honored for the work they do: Sherri Knothe, Margie Dang, and Melissa Young received gift certificates from Incahoots for their contributions to the garden.

We had a big cleanup day after pumpkins and squash were harvested. The squash bugs put up a good fight this year, but diatomaceous earth was sieved onto the bare beds to prevent them from taking over next year. The application of

vinegar and soap around the outside of the beds has nearly eradicated the weeds in the YCAP beds.

Alex seems to be enjoying his new role as Garden Manager as evidenced by how often we see him in the garden. He's making good suggestions for things to do next year. Tom is doing a great job on the new greenhouse tables.

Several beds were surrendered and reassigned to new gardeners for the remainder of the season. We really thank those who allow others an opportunity like this. Duniway Volunteer Service

days are scheduled for October, and we are looking forward to their help.

Parkview
maintenance has
been on
our minds,
and Carolyn and
Mark have
stepped up
to keep
things
under control



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#### http://extension.oregonstate.edu/yamhill

https://ycmga.org

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Extension Service Master Gardener™



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GENERAL MEETINGS OF THE YAMHILL COUNTY

MASTER GARDENERS™ ASSOCIATION ARE

ANNOUNCED IN THIS NEWSLETTER AND

ARE OPEN TO THE PUBLIC.

CONTRIBUTORS VARY BY MONTHLY EDITION.

GRAPEVINE EDITOR: DONN CALLAHAM

http://extension.oregonstate.edu/yamhill/

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